

Title (en)

HEAD-MOUNTED DISPLAY WITH PIVOTING IMAGING LIGHT GUIDE

Title (de)

AM KOPF MONTIERTE ANZEIGE MIT SCHWENKBAREM BILDGEBUNGSLICHTLEITER

Title (fr)

VISIOCASQUE AVEC CONDUIT DE LUMIÈRE D'IMAGERIE PIVOTANT

Publication

EP 3371634 A1 20180912 (EN)

Application

EP 17736343 A 20170105

Priority

- US 201662275560 P 20160106
- US 2017012348 W 20170105

Abstract (en)

[origin: WO2017120346A1] A frame supports a display apparatus against the head of a viewer. A projector fitted within the frame generates a beam of image-bearing light. A light guide coupled to a forward section of the frame has a waveguide, an in-coupling diffractive optic formed on the waveguide for directing image-bearing light beams into the waveguide, a turning optic formed on the waveguide for expanding the respective image-bearing light beams from the in-coupling diffractive optic in a first dimension, and an out-coupling diffractive optic formed on the waveguide for expanding the respective image-bearing light beams in a second dimension orthogonal to the first dimension and forming a virtual image within a viewer eyebox. A mount supports the light guide in front of the viewer and provides a hinge for angular adjustment of the waveguide with respect to the projector.

IPC 8 full level

G02B 6/34 (2006.01); **G02B 27/01** (2006.01); **G09G 5/00** (2006.01)

CPC (source: EP US)

G02B 6/00 (2013.01 - EP); **G02B 6/0031** (2013.01 - US); **G02B 6/0055** (2013.01 - US); **G02B 6/0086** (2013.01 - US);
G02B 27/0081 (2013.01 - EP); **G02B 27/0172** (2013.01 - US); **G02B 27/0176** (2013.01 - EP US); **G02B 27/4272** (2013.01 - EP);
G02B 6/34 (2013.01 - EP); **G02B 2027/0154** (2013.01 - EP); **G02B 2027/0159** (2013.01 - US); **G02B 2027/0174** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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EP 3371634 B1 20230906; JP 2019507365 A 20190314; JP 6792621 B2 20201125; US 11256100 B2 20220222; US 2020278554 A1 20200903

DOCDB simple family (application)

US 2017012348 W 20170105; CN 201780005793 A 20170105; CN 202410393735 A 20170105; EP 17736343 A 20170105;
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